

Doy Miller

MTA

From: Ronald Keele
sent: Thursday, June 29, 2006 12:05 PM
Stephen Silva; Wayne Jones; Denise Ferguson; Glenn Marrow; Callista Freedman; Callista Freedman; John Smolenski; Elizabeth Kreider; Beverly Hill
Cc: Doy Miller; Dennis Rafferty; Thomas Chisholm; Bernadette Bridges; R. Earl Lewis, Jr.
Subject: FW: Product recovery actions.

All, FYI.

Thanx,
Ron Keele

-----Original Message-----

From: Herb Meade [mailto:hmeade@mde.state.md.us]
Sent: Thursday, June 29, 2006 11:59 AM
To: Doy Miller; Ronald Keele
Cc: Ellen Jackson; Forest Arnold; Tom Walter; Yolande Norman
Subject: Product recovery actions.

MDE/OCP has received the work plan for groundwater remediation/product recovery for the Washington Blvd facility. We agree with and hereby approve the reduction in EFR/vactuck events as outlined in the plan. Therefore there is no need to work EFR events during this upcoming holiday weekend. MDE/OCP will respond in writing to the remaining sections of the work plan.

Herbert Meade
Maryland Department of the Environment
Administrator
1 Control Program
100 Washington Blvd.
Baltimore MD. 21230-1719
410-537-3385

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<<<GWIASIG 0.07>>>



MARYLAND TRANSIT ADMINISTRATION

MARYLAND DEPARTMENT OF TRANSPORTATION

Robert L. Ehrlich, Jr., Governor • Michael S. Steele, Lt. Governor • Robert L. Flanagan, Secretary • Lisa L. Dickerson, Administrator

June 28, 2006

Maryland Department of the Environment (MDE)
Herbert Meade, Administrator
Oil Control Program
1800 Washington Boulevard, Suite 620
Baltimore, MD 21230-1719

**Reference: DRAFT
SITE INVESTIGATION WORK PLAN
MTA BUSH STREET BUS FACILITY
1515 WASHINGTON BOULEVARD
BALTIMORE, MARYLAND**

Dear Mr. Meade

The Maryland Transit Administration (MTA) is submitting a copy of the above-referenced document for your review and comment.

Should any concerns arise, please call me at (410) 454-7141.

Sincerely,

A handwritten signature in black ink that reads "Ronald A. Keele".

Ronald A. Keele
Executive Director, Office of Safety & Risk Management
Maryland Transit Administration

Copies to:

Forest Arnold, MDE
Bernadette Bridges, MTA
Dennis Rafferty, MTA
Doy Miller, MTA
Thomas Chisholm, MTA



Seton Business Park
4701 Mount Hope Drive, Suite A
Baltimore, MD 21215
Fax: (410) 585-1470 Phone (410) 585-1460

TRANSMITTAL FORM

TO: Doy Miller
Office of Safety and Risk Management
Maryland Transit Administration
1515 Washington Blvd
Baltimore, Maryland 21230

DATE: 6/28/06

GF JOB NO.:
043012.1800

**RE: Submittal of Draft Site Investigation Work Plan for
MTA Bush Street Bus Facility**

ATTACHED ARE UNDER SEPARATE COVER (VIA) THE FOLLOWING ITEMS
 SHOP DRAWINGS PLANS SAMPLES SPECIFICATIONS CHANGE ORDER
 COPY OF LETTER PRINTS Other

COPIES	DATED	DESCRIPTION
5	6/28/06	Hard copy of work plan
1	6/28/06	Electronic copy of work plan on CD

THE ABOVE LISTED ARE TRANSMITTED AS CHECKED BELOW:

FOR APPROVAL	<input type="checkbox"/> CONFORMS AS SUBMITTED	<input type="checkbox"/> RESUBMIT	<input type="checkbox"/> COPIES FOR REVIEW
FOR YOUR USE	<input type="checkbox"/> CONFORMS WITH NOTATION	<input type="checkbox"/> SUBMIT	<input checked="" type="checkbox"/> COPIES FOR DISTRIBUTION
AS REQUESTED	<input type="checkbox"/> RETURNED FOR CORRECTIONS	<input type="checkbox"/> RETURN	<input type="checkbox"/> CORRECTED PRINTS
FOR REVIEW & COMMENT	<input type="checkbox"/> FOR BIDS DUE	<input type="checkbox"/> PRINTS RETURNED AFTER LOAN TO US	

REMARKS:

Enclosed are copies of the Site Investigation Work Plan, requested by MDE. Please let Drew Miller know if you have any questions or concerns.

COPY TO:

SIGNED: _____

DRAFT
SITE INVESTIGATION WORK PLAN

**MTA BUSH STREET BUS FACILITY
1515 WASHINGTON BOULEVARD
BALTIMORE, MARYLAND**

June 28, 2006

**Prepared by:
Gannett Fleming, Inc.
Baltimore, Maryland**

**Prepared for:
Maryland Transit Administration
Baltimore, Maryland**

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- 1 Site Location Map
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- A Well Grid Search from MDE

LIST OF ACRONYMS

DPT	direct push technology
bgs	below ground surface
GPS	global positioning system
LPH	liquid-phase hydrocarbons
MDE	Maryland Department of the Environment
MEAT	Maryland Environmental Assessment Technology for Underground Storage Tanks document by MDE
MTA	Maryland Transit Administration
PID	photoionization detector
SI	Site Investigation
USCS	Unified Soil Classification System
UST	underground storage tank

1 INTRODUCTION

1.1 Site Setting and History

The Maryland Transit Administration (MTA) Bush Street Bus Facility (Facility) is located at 1515 Washington Boulevard, Baltimore, Maryland, in southwest Baltimore City (Figure 1). The Facility includes bus maintenance shops, the Bus Wash Building, and a fueling station (Figure 2). The underground storage tank (UST) field, which supplies the fueling station, is located adjacent to and southeast of the Bus Wash Building near the center of the facility. The UST field contains four 20,000-gallon diesel fuel USTs, two 10,000-gallon gasoline USTs, and one 6,000-gallon lube oil UST (KCI Technologies, 2006). Seven monitoring wells are located around the UST field and are numbered MW-1 to MW-7 (Figure 2). For the purpose of this investigation, the Site is defined as the UST field and the immediate area approximately 100 feet downgradient to the east.

The Facility is surrounded on the east and south by industrial properties. A small residential area borders the Facility on the northeast. Carroll Park borders the Facility to the north and northwest.

Reports of two prior investigations were reviewed.

- 1) *MTA – Bush Street Facility, Stormwater Quality Improvements*. February 12, 2002. (KCI Technologies, 2002)
- 2) Communication from KCI Technologies to MTA, *Re: Tank Field Subsurface Investigation*. January 6, 2006. (KCI Technologies, 2006)

Soil and groundwater samples were collected during these prior investigations to evaluate the area for proposed utility improvements (KCI Technologies, 2002) and to evaluate subsurface contamination relating to the USTs (KCI Technologies, 2006).

Subsequent to the January 2006 investigation, a release of diesel fuel from an unknown location along the fuel supply line was detected. Maryland Department of the Environment (MDE) estimated that 6,100 gallons of diesel fuel was released (MDE, 2006). As an immediate response action, several exploratory borings and four recovery wells (RW-1, RW-2, RW-3, and RW-4) were installed southeast and southwest of the USTs (Figure 2). An additional recovery well, RW-4, was installed between MW-3 and MW-1 on June 21, 2006 for liquid-phase hydrocarbon (LPH) recovery.

As of the date of this Site Investigation (SI) Work Plan, a vacuum truck and stinger apparatus are being used to pump LPH from the four recovery wells. The diesel USTs have been emptied and a new diesel above ground storage tank has been installed.

1.2 Geology and Hydrogeology

The Facility is located in the Costal Plain Physiographic Province. The four borings completed in 2002 revealed four strata at the Facility (KCI Technologies, 2002). Stratum I, encountered in all borings from the surface to approximately 15 feet below ground surface (bgs), consisted of fill materials comprised of medium to medium dense sand (Unified Soil Classification System [USCS] classification SM), loose to medium dense fly ash (SM), and stiff to very stiff sandy to silty clay (CL). The occurrence of the other three strata varied laterally and vertically within the four borings. Stratum II, III, and IV consisted of stiff clay (CL), organic silty clay (OH), and medium dense to very dense sand (SM), respectively.

During previous investigations, groundwater was encountered between 15 and 17 feet bgs (KCI Technologies, 2002 and 2006). Based on data from previous investigations and the recent LPH recovery operations, groundwater flows in easterly and southeasterly directions in the vicinity of the tank field.

1.3 Work Plan Objectives

The objective of this SI Work Plan is to delineate the extent of LPH in the immediate vicinity of the UST tank field at the Facility. This objective is intended to comply with the requirements outlined by MDE in their June 20, 2006, correspondence to MTA (MDE, 2006).

2 EVALUATION OF THE SEVEN RISK FACTORS

As prescribed in the *Maryland Environmental Assessment Technology (MEAT) for Leaking Underground Storage Tanks* document (MDE, 2003), the Seven Risk Factors were used to evaluate the potential risk at the Facility from petroleum products in the subsurface.

2.1 Liquid-Phase Hydrocarbons

LPH has been detected on-site and, therefore, presents a risk as defined in the MEAT document (MDE, 2003). During the most recent LPH recovery operations, LPH has been detected in wells RW-1, RW-2, RW-3, RW-4, MW-1, and MW-6 (Table 1).

2.2 Current and Future Use of Impacted Groundwater

A list of all wells located within one mile of the UST field was provided by MDE (Appendix A). One domestic well, one industrial well, and 526 test wells were identified within one mile of the UST field. Based on the well application for the domestic well and the fact that the owner is Exxon (KCI Technologies, 2006), it is believed that this well was mislabeled and is actually a test well.

The Facility is located within the limits of the City of Baltimore, therefore, potable water is provided to the surrounding area by the public water system. Based on the highly developed nature of the area, the groundwater use is not expected to change in the future.

2.3 Migration of Contamination

It is unknown how far LPH has migrated in the subsurface. Based on data from previous investigations and the recent LPH recovery operations, groundwater flows is in easterly and southeasterly directions in the vicinity of the tank field.

2.4 Human Exposure

The evaluation of potentially complete pathways, potential exposure routes, and potential receptors at the Site is presented in Figure 4. The identification of a potential pathway, exposure route, and/or receptor does not guarantee that an unacceptable risk would exist. However, the potential pathways identified below require further evaluation.

Based on the known conditions to date and under current conditions, no complete exposure pathways are anticipated for any current receptor. No current residential or recreational receptors exist within the Site. No current ecological receptors are believed to exist at the Site because the Site is completely paved and located within an industrial facility. It is expected that the Site will continue as an industrial facility, therefore, no future residential, recreational, or ecological receptors are anticipated on the Site. A potential complete pathway may exist for the future construction worker during excavation.

In general, surficial soil (less than three feet bgs) is not expected to contain LPH due to the depth of the USTs and impermeable nature of the entire Site surface. However, surficial soil along the product supply line may contain LPH because it is suspected that the diesel release occurred along this line. When the USTs are excavated, a potential exposure pathway may exist for the future construction worker via direct contact with the soil and/or inhalation of vapors from the excavation. If LPH exists in the surficial soil, complete pathways to other future receptors are not anticipated because this soil will be removed with the USTs.

The subsurface soil (greater than three feet bgs) is expected to contain LPH at a depth approximating the water table, which occurs at about 15 feet bgs. As with the surficial soil, a potential complete pathway to future construction workers may exist if LPH is encountered during excavation or other soil disturbance. Potential risks to other future receptors from subsurface soil are not anticipated.

Dissolved-phase hydrocarbons may pose a potential risk to future construction workers if large concentrations in groundwater are encountered during excavations that reach the water table. No other potential pathways related to dissolved-phase hydrocarbons are anticipated for other receptors.

LPH exists at the site and, therefore, may present a potential pathway to future construction workers. Similar to the soils and dissolved-phase hydrocarbons, the potential pathway related to LPH to future construction workers may exist during excavation or disturbance of the LPH.

No surface water exists at the Site, therefore, surface water or sediments cannot form part of a potential pathway. Because the Facility's ground surface is impermeable and the petroleum products are below the surface, stormwater runoff is negligible in the formation of a potential pathway.

In summary, potential pathways were identified for the future construction worker during excavation or other subsurface disturbance at the Site.

2.5 Environmental Ecological Exposure

No environmental ecological exposure is expected because of the industrial nature of the Site and surrounding area. The closest ecological area is Carroll Park, which is approximately 1000 feet upgradient of the Site.

2.6 Impact to Utilities and Other Buried Services

Storm drain and sanitary sewer utility corridors run southwest to northeast approximately 100 feet southeast of the UST field (Figure 3). Based on field reconnaissance, the nearest sanitary manhole had an invert at approximately 8.5 feet bgs, however, the maximum depth of these utilities is not known. This utility corridor is not expected to be a source of LPH migration. The presence and location of other utilities in the vicinity of the Site is not known.

2.7 Other Sensitive Receptors

No other sensitive receptors were identified at this time.

3 DATA GAPS

This SI will address the following data gaps needed to comply with MDE's correspondence (MDE, 2006) and to evaluate the potential risks discussed in the previous section.

1. Lateral and vertical occurrence of LPH at the Site;
2. Lithology at and in the vicinity of the Site;
3. Groundwater elevations at and downgradient from the Site; and
4. Presence and elevation of utilities at and downgradient of the Site.

4 FIELD INVESTIGATION

4.1 Exploratory Borings

Prior to subsurface investigations, a private utility locator service will be retained to mark utilities at and downgradient of the Site. Exploratory borings will be used to ascertain the location of LPH downgradient of the Site. One set of exploratory borings will be drilled on 50-foot centers along the perimeter of the Site, approximately 20 feet from the existing monitoring wells (MW-1 to MW-7). The borings will be drilled to approximately 10 feet below the water table. Figure 3 shows the proposed locations of this mandatory set of exploratory borings. No borings will be drilled in the Bus Wash Building, considered to be upgradient from the USTs.

Direct push technology (DPT) will be used to complete the borings and install a temporary screened standpipe that will be left in the boring overnight. A surface seal of bentonite will be used to prevent potential stormwater from draining into the annulus or standpipe overnight. The elevation of groundwater and LPH, if present, will be monitored during the morning following boring installation.

Soil cores will be collected from each of the temporary borings. These cores will be screened in the field with a photoionization detector (PID) to estimate the location of possible petroleum hydrocarbon contamination. A small soil sample will be collected from at least one location in each boring where the PID reading was the highest. A dye (i.e., Sudan IV) will be used to determine the potential presence of LPH in the soil sample. Soil cores will be logged according to USCS classification.

Both the presence of LPH in the standpipe and the dye test will be used to determine if LPH is present at each boring location. Based on the presence or absence of LPH in the first set of borings, a second set of exploratory borings may be installed. Although adjustments may be needed to address findings from the first set of borings, the proposed location of the second set of borings is 50 feet away from the first boring points, measured radially from the UST field. These borings will be located on 50-foot centers as shown in Figure 3.

If LPH is encountered in the second set of borings, additional borings will be installed on MTA property, on 50-foot centers, in locations determined by the field engineer and approved by MDE.

4.2 Monitoring Wells

After preliminary characterization with the exploratory borings, 4-inch monitoring wells will be installed for LPH monitoring and potential recovery. Based on the measured LPH thickness in standpipes, soil characteristics, and field observations, a monitoring well configuration will be developed. The monitoring well configuration will be presented to MDE for approval prior to implementation. Monitoring well construction will be pursuant to MDE Oil Control Program guidelines (MDE, 2003).

4.3 Sampling and Measurements

No analytical or geotechnical samples will be collected during this investigation. To satisfy the objective of estimating the extent of LPH, the thickness of LPH and groundwater elevations in the exploratory borings and monitoring wells will be measured.

4.4 Well and Boring Survey

All Site wells and test borings completed during this investigation will be surveyed to the nearest 0.01 foot vertically based on an assumed site datum. Utility inverts in the vicinity of the Site will also be surveyed, if this information is not available through other means. Horizontal locations will be determined using a global positioning system (GPS) receiver. The survey information will be tabulated and included in the SI Report.

5 HEALTH AND SAFETY PLAN

Activities performed during this SI will be in accordance with the MTA Bush Street Bus Facility HASP.

6 SCHEDULE AND REPORTING

The following is an estimated schedule for the completion of the tasks outlined in this work plan.

- | | |
|--------------------------------|-----------------|
| • Private Utility Location | July 7, 2006 |
| • Exploratory Borings | July 21, 2006 |
| • Monitoring Well Installation | August 2, 2006 |
| • Surveying | August 4, 2006 |
| • SI Report | August 25, 2006 |

This schedule is based on the following assumptions:

1. Receipt of work plan approval from MDE by July 12, 2006.
2. A maximum of 16 exploratory borings will be installed.
3. A maximum of six monitoring wells will be installed.
4. The survey to an assumed datum will not be performed by professional surveyors.
5. No groundwater or soil samples will be collected for laboratory analysis.

The SI Report will indicate the delineation of LPH at and downgradient of the Site, and evaluate the Seven Risk Factors (MDE, 2003) in light of the new data gathered. The report will make recommendations for further investigation if warranted.

7 REFERENCES

- KCI Technologies, 2006. Communication from KCI Technologies to MTA, *Re: Tank Field Subsurface Investigation*. January 6.
- KCI Technologies, 2002. *MTA – Bush Street Facility, Stormwater Quality Improvements*. February 12.
- Maryland Department of the Environment (MDE), 2003. *Maryland Environmental Assessment Technology for Leaking Underground Storage Tanks*. February.
- MDE, 2006. Correspondence to Mr. Wayne Jones, *RE: Case No. 90-0737-BC4, Mass Transit Administration, 1515 Washington Boulevard, Baltimore City, Maryland*. June 20.

Table 1
Gauging Data

Site Investigation Work Plan
MTA Bush Street Bus Facility
Baltimore, Maryland

Measurement Date	Time	Depth to LPH (ft bgs)	DTW (ft bgs)	LPH Thickness (ft)	Groundwater Elevation
MW-1					
6/16/2006	9:05	17.51	19.95	2.44	80.26
6/16/2006	10:16	17.54	19.71	2.17	80.28
6/16/2006	10:53	13.49	13.51	0.02	84.72
6/16/2006	11:30	18.75	18.80	0.05	79.45
6/16/2006	12:15	18.70	18.75	0.05	79.50
6/16/2006	14:07	18.71	18.97	0.26	79.45
6/17/2006	9:30	18.54	19.95	1.41	79.42
6/17/2006	14:14	18.51	20.20	1.69	79.40
6/19/2006	7:50	18.36	20.84	2.48	79.40
6/19/2006	10:54	18.50	21.28	2.78	79.21
6/19/2006	14:12	18.27	21.40	3.13	79.38
6/20/2006	7:25	18.15	20.09	1.94	79.71
6/20/2006	11:14	18.68	18.81	0.13	79.51
6/20/2006	12:23	18.69	19.00	0.31	79.46
6/20/2006	15:52	18.56	19.41	0.85	79.50
6/21/2006	9:15	18.46	21.01	2.55	79.29
6/21/2006	18:57	18.20	21.60	3.40	79.40
6/22/2006	7:28	18.13	22.05	3.92	79.37
6/22/2006	10:00		19.55		78.66
6/22/2006	11:54		18.70		79.51
6/22/2006	14:04	18.65	19.70	1.05	79.37
6/23/2006	7:07	18.30	21.39	3.09	79.35
6/23/2006	8:39	18.82	19.06	0.24	79.35
6/23/2006	9:21	18.75	19.25	0.50	79.37
6/23/2006	9:53	18.86	19.37	0.51	79.26
6/23/2006	10:12	18.69	19.42	0.73	79.39
6/23/2006	10:49	18.65	19.53	0.88	79.40
6/23/2006	11:21	18.65	19.68	1.03	79.37

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Gauging Data

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MTA Bush Street Bus Facility
Baltimore, Maryland

Measurement Date	Time	Depth to LPH (ft bgs)	DTW (ft bgs)	LPH Thickness (ft)	Groundwater Elevation
6/23/2006	11:53	18.67	19.71	1.04	79.35
6/23/2006	13:50	18.78	18.90	0.12	79.41
6/24/2006	8:15	18.48	20.65	2.17	79.34
6/24/2006	14:40	18.79	19.26	0.47	79.34
6/25/2006	7:36	18.53	20.11	1.58	79.40
6/25/2006	8:45	18.80	19.35	0.55	79.31
6/25/2006	9:17	18.69	19.30	0.61	79.41
6/25/2006	9:45	18.65	19.35	0.70	79.43
6/25/2006	12:42	18.70	19.20	0.50	79.42
6/25/2006	14:01	18.71	19.12	0.41	79.43
6/27/2006	0:00	18.10	21.61	3.51	79.48
MW-2					
6/16/2006	10:30				
6/17/2006	9:28				
6/19/2006	9:05				
6/20/2006	7:59				
6/21/2006	8:55				
6/22/2006	7:52				
6/23/2006	7:46				
6/24/2006	8:13				
6/25/2006	7:35				
6/25/2006	13:59				
MW-3					
6/16/2006	9:07		18.00		80.54
6/16/2006	14:11		18.20		80.34
6/17/2006	7:25		18.00		80.54
6/17/2006	10:15		18.10		80.44
6/17/2006	14:16		18.18		80.36
6/19/2006	7:53		18.01		80.53

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6/19/2006	14:15		18.07		80.47
6/20/2006	7:44		17.91		80.63
6/20/2006	15:54		18.00		80.54
6/21/2006	8:53		17.81		80.73
6/21/2006	18:59		18.05		80.49
6/22/2006	7:35		17.92		80.62
6/22/2006	14:10		18.20		80.34
6/23/2006	7:12		17.94		80.60
6/23/2006	14:07		18.00		80.54
6/24/2006	14:45		18.07		80.47
6/25/2006	7:29		17.90		80.64
6/25/2006	14:03		17.93		80.61
MW-4					
6/16/2006	9:56		13.70		85.62
6/16/2006	14:47		13.85		85.47
6/17/2006	9:25		13.81		85.51
6/17/2006	14:12		13.85		85.47
6/19/2006	9:03		13.59		85.73
6/19/2006	14:31		13.58		85.74
6/20/2006	7:57		13.56		85.76
6/20/2006	16:27		14.20		85.12
6/21/2006	8:37		13.91		85.41
6/22/2006	7:51		13.67		85.65
6/22/2006	14:20		13.70		85.62
6/23/2006	7:45		13.64		85.68
6/23/2006	14:01		13.83		85.49
6/24/2006	8:12		13.72		85.60
6/24/2006	14:58		13.85		85.47
6/25/2006	7:34		13.65		85.67

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Baltimore, Maryland

Measurement Date	Time	Depth to LPH (ft bgs)	DTW (ft bgs)	LPH Thickness (ft)	Groundwater Elevation
6/25/2006	13:58		13.67		85.65
MW-5					
6/16/2006	9:10		13.58		85.42
6/16/2006	14:28		13.70		85.30
6/17/2006	14:04		13.76		85.24
6/19/2006	8:05		13.65		85.35
6/19/2006	14:23		13.67		85.33
6/20/2006	7:48		13.60		85.40
6/20/2006	16:00		13.74		85.26
6/21/2006	8:39		13.80		85.20
6/21/2006	19:01		13.90		85.10
6/22/2006	7:44		13.75		85.25
6/22/2006	14:14		13.75		85.25
6/23/2006	7:24		13.76		85.24
6/23/2006	13:55		13.78		85.22
6/24/2006	8:06		13.79		85.21
6/24/2006	14:50		13.83		85.17
6/25/2006	7:30		13.73		85.27
6/25/2006	13:52		13.75		85.25
MW-6					
6/16/2006	9:52	13.78	14.19	0.41	85.59
6/16/2006	14:44	13.77	14.19	0.42	85.59
6/17/2006	8:35	13.72	14.16	0.44	85.64
6/17/2006	14:10	13.73	14.16	0.43	85.63
6/19/2006	9:00	13.64	14.10	0.46	85.72
6/19/2006	14:29	13.60	14.00	0.40	85.77
6/20/2006	7:55	13.60	14.02	0.42	85.76
6/20/2006	12:07	14.50	14.82	0.32	84.88
6/20/2006	16:24	14.00	14.30	0.30	85.39

Table 1
Gauging Data

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MTA Bush Street Bus Facility
Baltimore, Maryland

Measurement	Date	Time	Depth to LPH (ft bgs)	DTW (ft bgs)	LPH Thickness (ft)	Groundwater Elevation
	6/21/2006	8:30	13.90	14.05	0.15	85.51
	6/22/2006	7:48		13.83		85.61
	6/22/2006	14:19	13.82	14.16	0.34	85.56
	6/23/2006	7:44	13.82	14.10	0.28	85.57
	6/23/2006	13:58	13.90	14.21	0.31	85.48
	6/24/2006	8:10	13.84	14.15	0.31	85.54
	6/24/2006	14:54	13.87	14.18	0.31	85.51
	6/25/2006	7:32	13.76	14.06	0.30	85.63
	6/25/2006	13:57	13.74	14.05	0.31	85.64
	6/27/2006	0:00	13.50	13.79	0.29	85.89
MW-7						
	6/16/2006	9:50				
	6/17/2006	8:17				
	6/19/2006	8:55				
	6/20/2006	7:54				
	6/21/2006	8:28				
	6/22/2006	7:46				
	6/23/2006	7:43				
	6/24/2006	8:08				
	6/25/2006	0:00				
	6/25/2006	13:55				
RW-1						
	6/8/2006	14:00	13.20	16.20	3.00	84.60
	6/9/2006	10:50	12.20	14.50	2.30	85.73
	6/9/2006	12:30	12.30	14.40	2.10	85.66
	6/12/2006	7:00	12.30	14.30	2.00	85.68
	6/12/2006	13:00	12.50	20.70	8.20	84.36
	6/13/2006	12:35	12.50	15.20	2.70	85.35
	6/13/2006	15:40	12.70	21.20	8.50	84.11

Table 1
Gauging Data

Site Investigation Work Plan
MTA Bush Street Bus Facility
Baltimore, Maryland

Measurement Date	Time	Depth to LPH (ft bgs)	DTW (ft bgs)	LPH Thickness (ft)	Groundwater Elevation
6/16/2006	9:22	12.76	16.21	3.45	84.96
6/16/2006	9:30	12.64	16.91	4.27	84.93
6/16/2006	10:12	12.71	17.50	4.79	84.77
6/16/2006	11:09	12.69	17.15	4.46	84.85
6/16/2006	14:18	13.80	18.81	5.01	83.64
6/17/2006	7:15	12.80	16.15	3.35	84.94
6/17/2006	7:50	12.90	15.80	2.90	84.92
6/17/2006	9:10	12.95	18.21	5.26	84.44
6/17/2006	11:50	13.01	17.35	4.34	84.55
6/17/2006	13:55	13.04	16.02	2.98	84.76
6/19/2006	7:56	13.91	15.55	1.64	84.13
6/19/2006	11:05	13.98	15.45	1.47	84.10
6/19/2006	14:17	12.87	15.49	2.62	85.00
6/20/2006	7:43	12.83	15.11	2.28	85.10
6/20/2006	12:21	12.85	15.28	2.43	85.05
6/20/2006	16:37	13.05	16.00	2.95	84.76
6/21/2006	8:50	12.91	15.50	2.59	84.96
6/21/2006	14:53	13.00	15.45	2.45	84.90
6/21/2006	16:10	13.05	15.60	2.55	84.83
6/21/2006	17:50	13.20	15.70	2.50	84.69
6/21/2006	19:05	13.20	15.50	2.30	84.73
6/22/2006	7:37	12.98	15.41	2.43	84.92
6/22/2006	12:10	13.00	15.60	2.60	84.87
6/22/2006	14:40	13.15	15.69	2.54	84.73
6/23/2006	7:16	13.00	15.25	2.25	84.94
6/23/2006	9:25	13.00	15.40	2.40	84.91
6/23/2006	14:09	13.69	14.29	0.60	84.54
6/24/2006	7:20	13.05	15.28	2.23	84.89
6/24/2006	12:45	13.11	15.45	2.34	84.81
6/24/2006	14:47	13.10	17.38	4.28	84.47

Table 1
Gauging Data

Site Investigation Work Plan
MTA Bush Street Bus Facility
Baltimore, Maryland

Measurement Date	Time	Depth to LPH (ft bgs)	DTW (ft bgs)	LPH Thickness (ft)	Groundwater Elevation
6/25/2006	7:00	13.03	15.06	2.03	84.94
6/25/2006	7:44		13.60		84.74
6/25/2006	13:47	13.08	15.48	2.40	84.83
6/27/2006	0:00	12.69	13.02	0.33	85.59
RW-2					
6/8/2006	15:05	12.70	12.70	0.00	85.97
6/9/2006	11:05	12.60	14.20	1.60	85.78
6/9/2006	13:30	13.00	13.20	0.20	85.63
6/12/2006	7:10	12.70	16.00	3.30	85.38
6/12/2006	13:08	13.10	14.00	0.90	85.41
6/13/2006	12:43	12.80	15.90	3.10	85.31
6/13/2006	15:50	13.40	13.50	0.10	85.25
6/16/2006	9:13	13.10	14.64	1.54	85.29
6/16/2006	12:23	13.31	13.69	0.38	85.29
6/16/2006	14:23	13.34	13.83	0.49	85.24
6/17/2006	8:10	13.21	14.07	0.86	85.31
6/17/2006	14:00	13.33	14.21	0.88	85.18
6/19/2006	8:00	13.22	14.05	0.83	85.30
6/19/2006	10:50	13.24	14.10	0.86	85.28
6/19/2006	14:19	13.20	14.09	0.89	85.31
6/20/2006	7:46	13.19	14.05	0.86	85.33
6/20/2006	11:37	13.43	14.51	1.08	85.05
6/20/2006	13:05	13.40	13.45	0.05	85.26
6/20/2006	15:57	14.44	14.52	0.08	84.22
6/21/2006	8:43	13.44	13.60	0.16	85.20
6/21/2006	19:03	13.40	13.61	0.21	85.23
6/22/2006	7:39	13.45	13.55	0.10	85.20
6/22/2006	14:12	13.49	13.57	0.08	85.17
6/23/2006	7:23	13.41	13.55	0.14	85.23

Table 1
Gauging Data

Site Investigation Work Plan
MTA Bush Street Bus Facility
Baltimore, Maryland

Measurement Date	Time	Depth to LPH (ft bgs)	DTW (ft bgs)	LPH Thickness (ft)	Groundwater Elevation
6/23/2006	13:52	13.51	13.68	0.17	85.13
6/24/2006	8:05	13.47	13.61	0.14	85.17
6/24/2006	14:49	13.52	13.69	0.17	85.12
6/25/2006	7:42	13.45	13.60	0.15	85.19
6/25/2006	13:49	13.43	13.59	0.16	85.21
6/27/2006	0:00	13.10	13.29	0.19	85.54
RW-3					
6/8/2006	15:00	12.60	14.20	1.60	86.43
6/9/2006	11:00	13.10	14.70	1.60	85.93
6/9/2006	14:55	13.30	18.70	5.40	85.05
6/12/2006	7:15	13.30	14.60	1.30	85.79
6/12/2006	13:18	13.40	16.00	2.60	85.45
6/13/2006	12:51	13.50	13.70	0.20	85.78
6/13/2006	16:18	16.30	16.50	0.20	82.98
6/16/2006	9:15		13.65		85.67
6/16/2006	14:36		13.69		85.63
6/17/2006	8:15		13.61		85.71
6/17/2006	14:05		13.65		85.67
6/19/2006	8:08		13.60		85.72
6/19/2006	14:25		13.59		85.73
6/20/2006	7:52		13.58		85.74
6/20/2006	16:04		13.78		85.54
6/21/2006	9:02		13.65		85.67
6/22/2006	7:45		13.60		85.72
6/22/2006	14:16		13.62		85.70
6/23/2006	7:42		13.63		85.69
6/23/2006	13:57	13.68	13.71	0.03	85.63
6/24/2006	8:07		13.62		85.70
6/24/2006	14:52	13.66	13.67	0.01	85.66

Table 1
Gauging Data

Site Investigation Work Plan
MTA Bush Street Bus Facility
Baltimore, Maryland

Measurement Date	Time	Depth to LPH (ft bgs)	DTW (ft bgs)	LPH Thickness (ft)	Groundwater Elevation
6/25/2006	13:54		13.59		85.73
RW-4					
6/21/2006	10:58	13.59	15.02	1.43	84.34
6/21/2006	14:55	12.85	15.50	2.65	84.86
6/21/2006	17:45	13.05	15.20	2.15	84.75
6/21/2006	18:55	13.05	15.50	2.45	84.70
6/22/2006	7:31	12.88	15.63	2.75	84.82
6/22/2006	9:58	12.88	15.75	2.87	84.79
6/22/2006	12:08	13.09	14.05	0.96	84.93
6/22/2006	14:06	12.98	15.50	2.52	84.76
6/23/2006	7:08	12.84	15.54	2.70	84.86
6/23/2006	9:22	13.98	14.19	0.21	84.17
6/23/2006	9:47	13.20	14.05	0.85	84.84
6/23/2006	10:14	13.11	14.13	1.02	84.90
6/23/2006	10:47	13.10	14.25	1.15	84.88
6/23/2006	11:22	13.29	14.35	1.06	84.71
6/23/2006	12:38	13.19	14.93	1.74	84.69
6/23/2006	13:01	13.19	15.20	2.01	84.64
6/23/2006	13:46	15.25	15.57	0.32	82.88
6/24/2006	8:16	13.00	15.60	2.60	84.72
6/24/2006	10:25	12.99	15.62	2.63	84.73
6/24/2006	12:46	12.95	15.64	2.69	84.76
6/24/2006	14:43	13.04	17.98	4.94	84.26
6/25/2006	7:40	12.89	15.80	2.91	84.78
6/25/2006	14:07	12.98	15.22	2.24	84.81
6/27/2006	0:00	12.62	12.80	0.18	85.54

Table 1
Gauging Data

Site Investigation Work Plan
MTA Bush Street Bus Facility
Baltimore, Maryland

Measurement	Depth to		LPH	Groundwater	
Date	Time	LPH (ft bgs)	DTW (ft bgs)	Thickness (ft)	Elevation

Notes:

DTW: depth to water. Not corrected for LPH encountered.

LPH: liquid-phase hydrocarbon

ft bgs: feet below ground surface

Groundwater elevation corrected for LPH encountered in well. Calculation based on an assumed site datum.

Blanks indicate the absence of LPH or groundwater during that measurement.



USGS 7.5 Minute Series, Topographic Map –Baltimore West, MD, 1953. Photorevised 1966 and 1974.

Contour Interval 20 feet

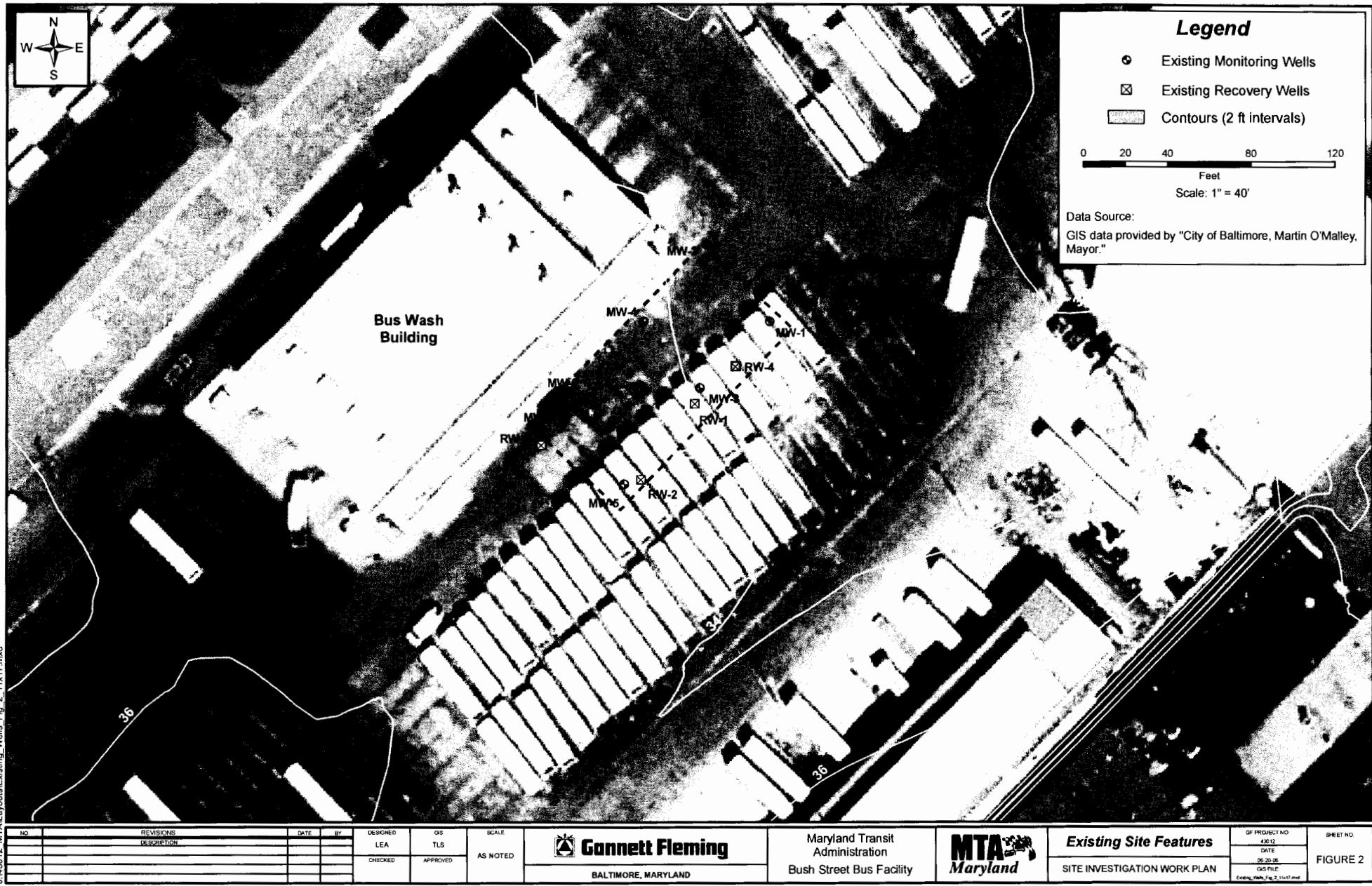
Longitude $76^{\circ} 38' 18''$ W

Latitude $39^{\circ} 16' 33''$ N

FIGURE 1

SITE LOCATION MAP

SITE INVESTIGATION WORK PLAN
MTA BUSH STREET BUS FACILITY
1515 WASHINGTON BOULEVARD
BALTIMORE, MARYLAND



JM3012.MTALayouts\Existing_Wells.Fig_2.1x17.mxd

NO	REVISIONS DESCRIPTION	DATE	BY	DESIGNED LEA	GIS TLS	SCALE
				CHECKED	APPROVED	AS NOTED



Gannett Fleming

BALTIMORE, MARYLAND

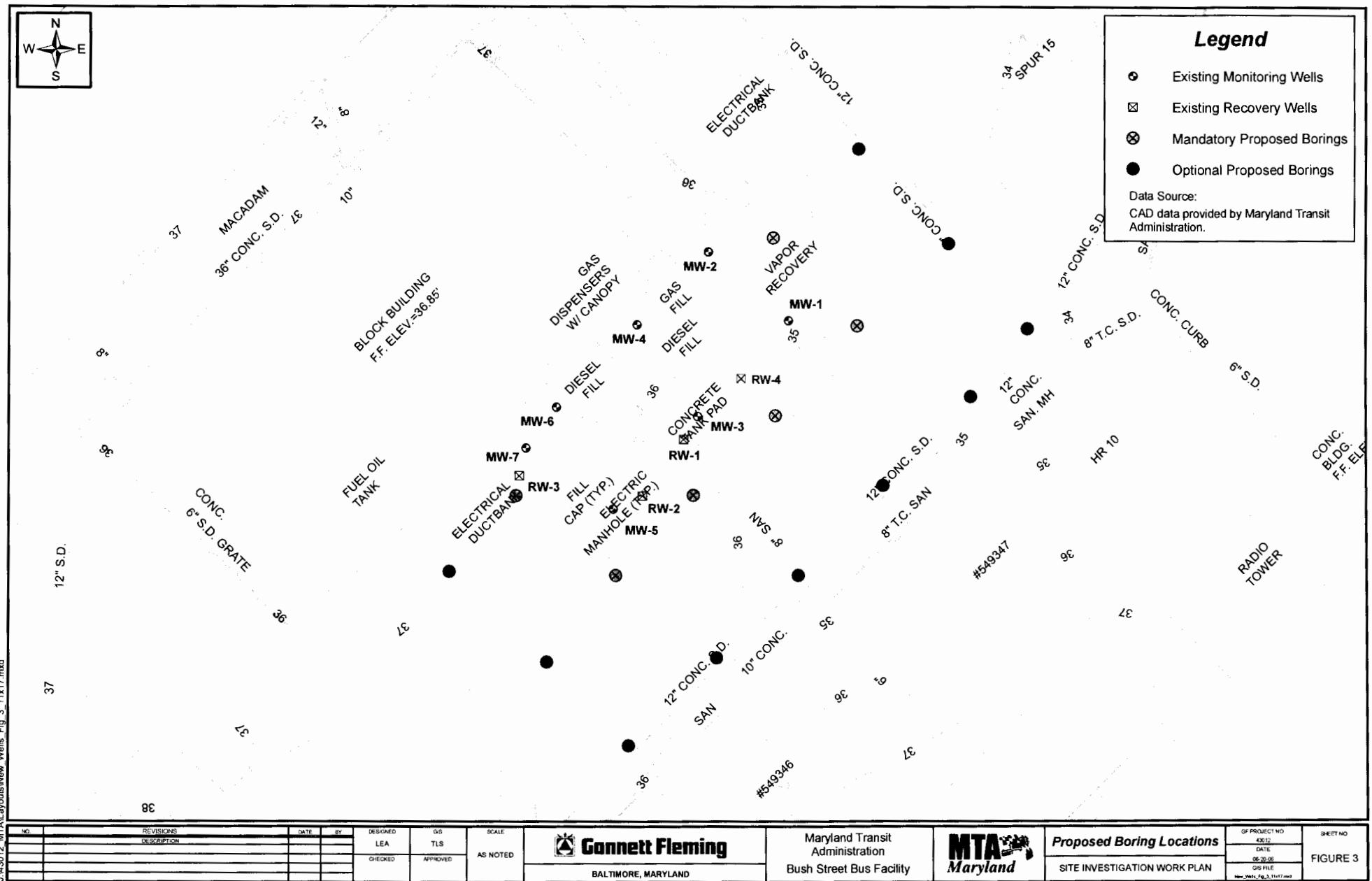
Maryland Transit
Administration
Bush Street Bus Facility



Existing Site Features
SITE INVESTIGATION WORK PLAN

GF PROJECT NO
43012
DATE
05-20-06
GIS FILE
Existing_Wells.Fig_2.1x17.mxd

SHEET NO.
FIGURE 2



U:\43012_MTA\Layouts\New_Wells Fig 3_11x17.mxd

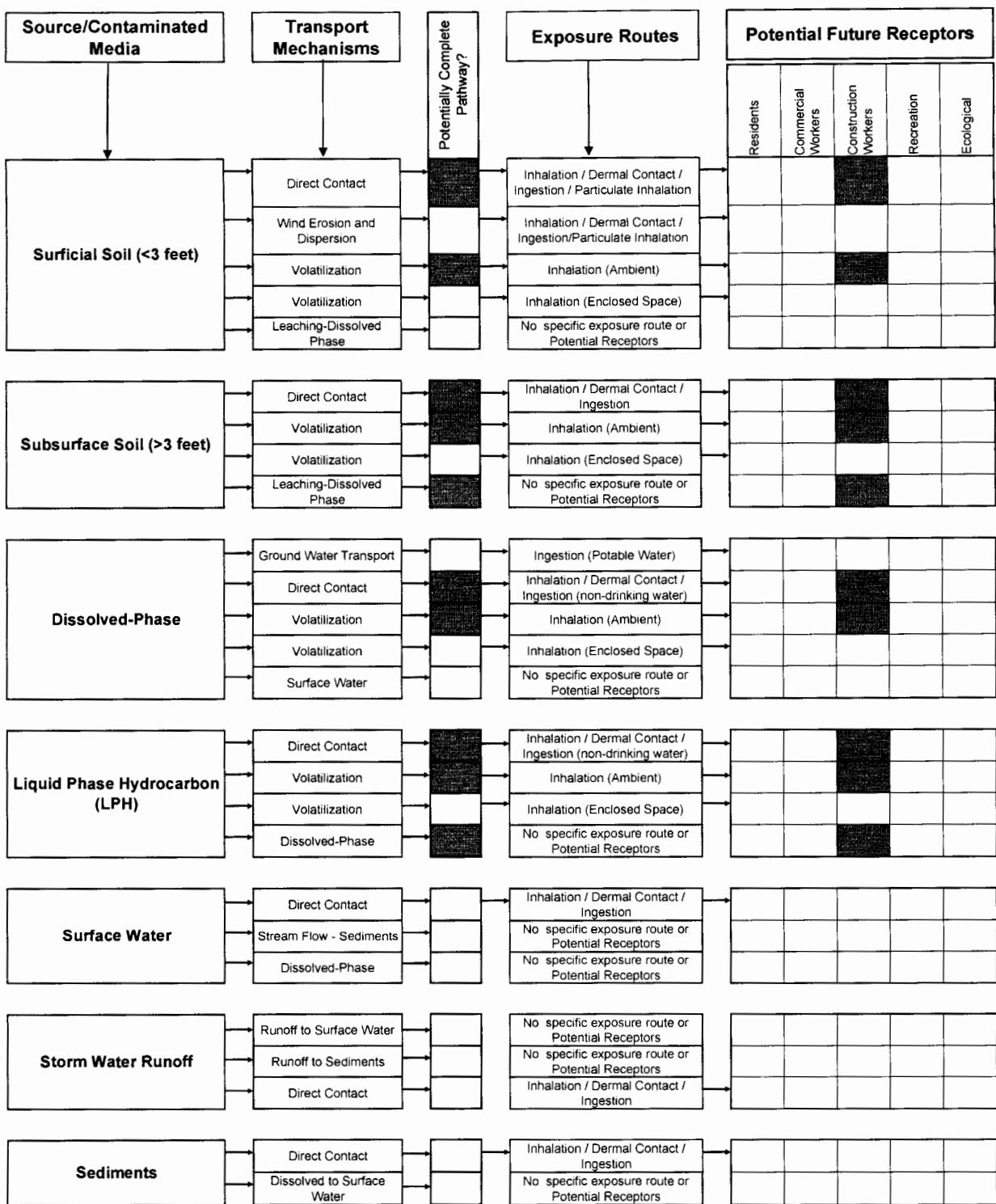


Figure 4
Preliminary Potential Exposure Evaluation
Site Investigation Work Plan
MTA Bush Street Bus Facility
Baltimore, Maryland

APPENDIX A

WELL GRID SEARCH FROM MDE

Appendix A Interpretation of MDE Well Codes

- A successful well later abandoned
- C Permit cancelled
- D Deepened an existing well
- U Unsuccessful new well
- R Reworked or redrilled well under same permit
- X More than one hole drilled before a sufficient yield

WATER USE CODE

- DW Combination code for: Home or Public Use
- F Farm (livestock watering & Agricultural Irrigation)
- G Geo-thermal
- I Industrial, Commercial, State and Federal Gov. (required an appropriation permit)
- M Municipal
- T Test, Observation, Monitoring (may require an appropriation)

REPLACEMENT OR DEEPEN WELLS

- N This well will not replace an existing well (new well)
- Y Yes, this well will replace a well that will be abandoned & sealed.
- S This well will replace a well that will be used as a standby

Appendix A

Well Grid Search from MDE

Site Investigation Work Plan

MTA Bush Street Bus Facility, Baltimore, MD

Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC940538	525000	905000		N	RUSSELL ST									DW	
BC730078	526000	907000		N	SHARP ST	350	20	35	146	HO	84	350	I	01-Feb-82	
BA948610	517000	897000		N	HOLLINS FERRY ROAD								C	T	
BC941287	517000	898000		N	PATAPSCO AVE	15				PL	5	15	T	22-Feb-02	
BC941290	517000	898000		N	PATAPSCO AVE	15				PL	5	15	T	02-Feb-02	
BC941291	517000	898000		N	PATAPSCO AVE	15				PL	5	15	T	02-Feb-02	
BC941292	517000	898000		N	PATAPSCO AVE	15				PL	5	15	T	02-Feb-02	
BC941289	517000	898000		N	PATAPSCO AVE	15				PL	5	15	T	02-Feb-02	
BC941288	517000	898000		N	PATAPSCO AVE	15				PL	5	15	T	22-Feb-02	
BC941293	517000	898000		N	PATAPSCO AVENUE	15				PL	5	15	T	02-Feb-02	
BC940565	517000	900000		N	STRANDEN RD								T		
BC941510	517000	902000		N	ANNAPOLIS								T		
BA883951	518000	896000		N	2000 HAMMONDS FERRY	41		29	39	PL	20	40	T	22-Dec-92	
BA940193	518000	896000		N	SULPHUR SPRING	12	1	1	1	PL	2	12	T	05-May-94	
BC940442	518000	896000	001A	N	WHITTINGTON AVE	12							T	27-Oct-97	
BC941350	518000	898000	1	N	PATAPSCO AVE	25				PL	5	25	T	30-Aug-02	
BA942744	518000	902000		N	ANNAPOLIS RD								T		
BC940564	518000	902000		N	ERICK ST	16							T	03-Sep-98	
BC880003	518000	903000		N	WATERVIEW	16	1	1	1	PL	6	16	T	11-Apr-88	
BC880002	518000	903000		N	WATERVIEW AVE	16	1	1	1	PL	6	16	T	11-Apr-88	
BC880001	518000	903000		N	WATERVIEW AVE	16	1	1	1	PL	6	16	T	11-Apr-88	
BC810703	519000	897000		N	WHITTINGTON AVE	42	1	37	37	PL	32	42	T	07-Jan-87	
BC810704	519000	897000		N	WHITTINGTON AVE								T		
BC810702	519000	897000		N	WHITTINGTON AVE								T		
BC941095	519000	904000		N	WATERVIEW AVE	15							T	31-May-01	
BC811000	519000	905000		N	WATERVIEW AVE	16	1	1	1	PL	6	16	T	11-Apr-88	
BC810871	519000	905000		N	WATERVIEW AVE	28	1	1	1	PL	18	28	T	19-Oct-87	
BC810874	519000	905000		N	WATERVIEW AVE	30	1	1	1	PL	20	30	T	20-Oct-87	
BC810873	519000	905000		N	WATERVIEW AVE	35	1	1	1	PL	25	35	T	19-Oct-87	
BC810872	519000	905000		N	WATERVIEW AVE								T		
BC880973	520000	896000		N	INVERNESS	29				PL	19	29	T	09-Oct-90	
BC881264	520000	896000		N	INVERNESS AVE								T		
BC881262	520000	896000		N	INVERNESS AVE	56				PL	46	56	T	05-Apr-91	
BC881263	520000	896000		N	INVERNESS AVE								T		
BC881261	520000	896000		N	INVERNESS AVENUE								T		

Appendix A

Well Grid Search from MDE

Site Investigation Work Plan

MTA Bush Street Bus Facility, Baltimore, MD

Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC881266	520000	896000		N	INVERNESS AVENUE									T	
BC881260	520000	896000		N	INVERNESS AVENUE									T	
BC881002	520000	896000		N	INVERNESS ST	30				PL	20	30	T	16-Oct-90	
BC880972	520000	896000		N	INVERNESS ST.	52				PL	37	52	T	15-Oct-90	
BC880969	520000	896000		N	INVERNESS ST.	56				PL	41	56	T	17-Oct-90	
BC880971	520000	896000		N	INVERNESS ST.	32				PL	22	32	T	12-Oct-90	
BC880970	520000	896000		N	INVERNESS ST.	54				PL	39	54	T	12-Oct-90	
BC920677	520000	897000		N	GABLE AVE								T		
BC920678	520000	897000		N	GABLE AVE	35				PL	15	35	T	19-Apr-95	
BC940270	520000	900000		N	101 DICKMAN ST								T		
BC940353	520000	900000		N	1101 DESOTO ROAD	28	1	1	1	PL	8	28	T	09-Jul-97	
BC920078	520000	900000		N	1228 HOLLINS STREET								T		
BC881926	520000	900000		N	1300 S MONROE STREET	25				PL	5	25	T	22-Jun-92	
BC881927	520000	900000		N	1300 S MONROE STREET								T		
BC881928	520000	900000		N	1300 S MONROE STREET								T		
BC881929	520000	900000		N	1300 S MONROE STREET	27				PL	7	27	T	22-Jun-92	
BC941388	520000	900000	MW-9	N	1401 SEVERN ST	20	0.2	9	18	PL	4	19	T	01-May-03	
BC941386	520000	900000	MW-11	N	1401 SEVERN ST	20	0.25	8	18	PL	4	19	T	02-May-03	
BC941385	520000	900000	MW-12	N	1401 SEVERN ST	20	0.5	9	18	PL	4	19	T	02-May-03	
BC941384	520000	900000	MW-13	N	1401 SEVERN ST	20	0.25	8	18	PL	4	19	T	02-May-03	
BC941389	520000	900000	MW-8	N	1401 SEVERN ST	20	0.4	10	19	PL	4	19	T	01-May-03	
BC941390	520000	900000	MW-14	N	1401 SEVERN ST	20	0.25	10	18	PL	4	19	T	02-May-03	
BC941387	520000	900000	MW-10	N	1401 SEVERN ST	20	0.25	9	18	PL	4	19	T	02-May-03	
BC881974	520000	900000		N	1430 S MONROE ST	25				PL	5	25	T	13-Aug-92	
BC881976	520000	900000		N	1430 S MONROE ST	25				PL	5	25	T	13-Aug-92	
BC882171	520000	900000		N	1430 S. MONROE STREE	25	1	1	1	PL	5	25	T	07-Dec-92	
BC882170	520000	900000		N	1430S MONROE ST	25				PL	5	25	T	07-Dec-92	
BC940488	520000	900000		N	1600-1606 BUSH STREE	18	1	1	1	PL	8	18	T	12-Mar-98	
BC940489	520000	900000		N	1600-1606 BUSH STREE	18	1	1	1	PL	8	18	T	12-Mar-98	
BC920879	520000	900000		N	1711 WICOMICO ST	25	1	12	23	PL	5	20	T	24-Apr-96	
BC920878	520000	900000		N	1711 WICOMICO ST	25	1	12	23	PL	5	25	T	24-Apr-96	
BC881666	520000	900000		N	1848 MCHENRY STREET	20				PL	10	20	T	18-Nov-91	
BC881885	520000	900000		N	1900 S HANOVER ST	36				PL	16	36	T	29-May-92	
BC940684	520000	900000		N	2100 WASHINGTON BLVD	23	1		20	PL	3	23	T	26-Aug-99	
BC940204	520000	900000		N	2120 ANNAPOLIS RD	25	1	1	1	PL	5	25	T	21-Oct-96	

Appendix A

Well Grid Search from MDE

Site Investigation Work Plan

MTA Bush Street Bus Facility, Baltimore, MD

Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC940205	520000	900000		N	2120 ANNAPOLIS RD	23	1	1	1	PL	3	23		T	21-Oct-96
BC940206	520000	900000		N	2120 ANNAPOLIS RD	23	1	1	1	PL	3	23		T	22-Oct-96
BC940207	520000	900000		N	2120 ANNAPOLIS RD									T	
BC940203	520000	900000		N	2120 ANNAPOLIS ROAD	23	1	1	1	PL	3	23		T	21-Oct-96
BC940202	520000	900000		N	2120 ANNAPOLIS ROAD	23	1	1	1	PL	3	23		T	21-Oct-96
BC941164	520000	900000		N	2325 HOLLINS FERRY R	20				PL	10	20		T	01-Nov-01
BC941162	520000	900000		N	2325 HOLLINS FERRY R	20				PL	5	20		T	02-Nov-01
BC941160	520000	900000		N	2325 HOLLINS FERRY R	20				PL	5	20		T	01-Nov-01
BC941161	520000	900000		N	2325 HOLLINS FERRY R	20				PL	10	20		T	02-Nov-01
BC941163	520000	900000		N	2325 HOLLINS FERRY R	45				PL	30	45		T	01-Nov-01
BC940527	520000	900000		N	2325 HOLLINS FERRY R	10				PL	5	10		T	27-Jul-98
BC940528	520000	900000		N	2325 HOLLINS FERRY R	10				PL	5	10		T	27-Jul-98
BC940529	520000	900000		N	2325 HOLLINS FERRY R	10				PL	5	10		T	27-Jul-98
BC920067	520000	900000		N	501-507 LOMBARD ST	57				PL	27	57		T	04-Oct-93
BC920068	520000	900000		N	501-507 LOMBARD ST	58				PL	28	58		T	04-Oct-93
BC920069	520000	900000		N	501-507 LOMBARD ST	57				PL	27	57		T	04-Oct-93
BC882004	520000	900000		N	610 W WEST STREET									T	
BC882005	520000	900000		N	610 W WEST STREET									T	
BC881858	520000	900000		N	ANNAPOLIS RD	26				PL	11	26		T	29-Apr-92
BC940685	520000	900000		N	ANNAPOLIS ROAD	35				PL	15	35		T	30-Aug-99
BC940686	520000	900000	MW2	N	ANNAPOLIS ROAD									T	
BC940687	520000	900000	MW1	N	ANNAPOLIS ROAD									T	
BC881038	520000	900000		N	BALTO-WASHINGTON PKW	13				PL	3	13		T	05-Dec-90
BC920061	520000	900000		N	BAYARD STREET	23				PL	3	23		T	10-Sep-93
BC880589	520000	900000		N	BENSON AVENUE	60				PL	50	60		T	02-Nov-89
BC882075	520000	900000		N	BUSH STR.	20	1	1	1	PL	10	20		T	14-Oct-92
BC882076	520000	900000			BUSH STR.	18	1	1	1	PL	8	18		T	14-Oct-92
BC882078	520000	900000		N	BUSH STREET	20	1	1	1	PL	10	20		T	14-Oct-92
BC882321	520000	900000		N	BUSH STREET	18				PL	3	8		T	10-Mar-93
BC882323	520000	900000		N	BUSH STREET	19				PL	4	14		T	10-Mar-93
BC882175	520000	900000		N	BUSH STREET	20				PL	5	20		T	17-Dec-92
BC882322	520000	900000		N	BUSH STREET	19				PL	4	14		T	10-Mar-93
BC882176	520000	900000		N	BUSH STREET	19				PL	4	19		T	17-Dec-92
BC940503	520000	900000		N	CARROL ST	20				PL	5	20		T	01-May-98
BC940504	520000	900000		N	CARROL ST	20				PL	5	20		T	01-May-98

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC880802	520000	900000		N	CONWAY ST.	13				PL	3	13	T		07-Jun-90
BC920208	520000	900000		N	DICKMAN STREET	25	1	1	1	PL	10	25	T		05-Jan-94
BC920209	520000	900000		N	DICKMAN STREET	25	1	1	1	PL	10	25	T		03-Jan-94
BC920207	520000	900000		N	DICKMAN STREET	25	1	1	1	PL	10	25	T		03-Jan-94
BC881139	520000	900000		N	ELMIRA STREET	15				PL	9	14	T		31-Jan-91
BC880993	520000	900000		N	FORT AVENUE	22				PL	5	22	T		19-Oct-90
BC880992	520000	900000		N	FORT AVENUE	20				PL	5	20	T		21-Oct-90
BC880991	520000	900000		N	FORT AVENUE	22				PL	5	22	T		19-Oct-90
BC880990	520000	900000		N	FORT AVENUE	24				PL	5	24	T		21-Oct-90
BC880989	520000	900000		N	FORT AVENUE	18				PL	5	18	T		19-Oct-90
BC920553	520000	900000		N	HAINES STREET	20				PL	10	20	T		02-Nov-94
BC920552	520000	900000		N	HAINES STREET	20				PL	10	20	T		01-Nov-94
BC881022	520000	900000		N	HAMBURG ST	18				PL	8	18	T		30-Nov-90
BC920389	520000	900000		N	HANOVER STREET	24	1	1	1	PL	4	24	T		05-May-94
BC920390	520000	900000		N	HANOVER STREET	23	1	1	1	PL	3	23	T		05-May-94
BC920388	520000	900000		N	HANOVER STREET	24				PL	4	24	T		18-May-94
BC880509	520000	900000		N	HOLLINS FERRY	47				PL	37	47	T		30-Jan-90
BC880508	520000	900000		N	HOLLINS FERRY	75				PL	65	75	T		30-Jan-90
BC880928	520000	900000		N	HOLLINS FERRY	22				PL	12	22	T		29-Aug-90
BC880675	520000	900000		N	HOLLINS FERRY	30				PL	20	30	T		02-Feb-90
BC880672	520000	900000		N	HOLLINS FERRY	32				PL	19	29	T		22-Jan-90
BC880674	520000	900000		N	HOLLINS FERRY	15				PL	5	15	T		23-Jan-90
BC882306	520000	900000		N	HOLLINS FERRY RD	19				PL	9	19	T		04-Mar-93
BC882301	520000	900000		N	HOLLINS FERRY RD	25				PL	15	25	T		18-Mar-93
BC882302	520000	900000		N	HOLLINS FERRY RD	39				PL	29	39	T		17-Mar-93
BC882303	520000	900000		N	HOLLINS FERRY RD	95				PL	85	95	T		12-Mar-93
BC882304	520000	900000		N	HOLLINS FERRY RD	60				PL	40	60	T		04-Mar-93
BC882305	520000	900000		N	HOLLINS FERRY RD	50				PL	40	50	T		17-Mar-93
BC880673	520000	900000		N	HOLLINS FERRY RD 2325	20				PL	15	20	T		09-Feb-90
BC940220	520000	900000		N	HOLLINS FERRY ROAD	35				PL	5	35	T		23-Nov-96
BC940219	520000	900000		N	HOLLINS FERRY ROAD	35				PL	5	35	T		23-Nov-96
BC940256	520000	900000		N	HOLLINS FERRY ROAD	40				PL	5	40	T		27-Nov-96
BC940349	520000	900000		N	HOLLINS FERRY ROAD	41				PL	6	41	T		12-Jun-97
BC940227	520000	900000		N	HOLLINS FERRY ROAD	35				PL	5	35	T		26-Nov-96
BC940342	520000	900000		N	HOLLINS FERRY ROAD	37				PL	7	37	T		11-Jun-97

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC940339	520000	900000		N	HOLLINS FERRY ROAD	36				PL	6	36		T	12-Jun-97
BC940225	520000	900000		N	HOLLINS FERRY ROAD	35				PL	5	35		T	25-Nov-96
BC940345	520000	900000		N	HOLLINS FERRY ROAD	41				ST	6	41		T	10-Jun-97
BC940346	520000	900000		N	HOLLINS FERRY ROAD	41				ST	6	41		T	16-Jun-97
BC940432	520000	900000		N	HOLLINS FERRY ROAD	35				PL	5	35		T	24-Sep-97
BC940341	520000	900000		N	HOLLINS FERRY ROAD	32				PL	7	32		T	13-Jun-97
BC940340	520000	900000		N	HOLLINS FERRY ROAD	38				PL	8	38		T	12-Jun-97
BC940347	520000	900000		N	HOLLINS FERRY ROAD	40				ST	5	40		T	11-Jun-97
BC940348	520000	900000		N	HOLLINS FERRY ROAD	35				ST	5	35		T	17-Jun-97
BC940224	520000	900000		N	HOLLINS FERRY ROAD	17				PL	4	17		T	25-Nov-96
BC940223	520000	900000		N	HOLLINS FERRY ROAD	35				PL	5	35		T	24-Nov-96
BC940344	520000	900000		N	HOLLINS FERRY ROAD	41				ST	6	41		T	10-Jun-97
BC940226	520000	900000		N	HOLLINS FERRY ROAD	36				PL	6	36		T	26-Nov-96
BC940222	520000	900000		N	HOLLINS FERRY ROAD	35				PL	5	35		T	24-Nov-96
BC940221	520000	900000		N	HOLLINS FERRY ROAD	35				PL	5	35		T	24-Nov-96
BC940229	520000	900000		N	HOLLINS FERRY ROAD	40				PL	5	40		T	27-Nov-96
BC940228	520000	900000		N	HOLLINS FERRY ROAD	35				PL	5	35		T	27-Nov-96
BC940343	520000	900000		N	HOLLINS FERRY ROAD	38				PL	8	38		T	11-Jun-97
BC941151	520000	900000	TMP-2	N	HOWARD ST									T	
BC941150	520000	900000	TMP-1	N	HOWARD ST									T	
BC880488	520000	900000		N	KLOMAN STREET	13				PL	3	13		T	26-Jul-89
BC880499	520000	900000		N	KLOMAN STREET	10				PL	2	10		T	25-Jul-89
BC880487	520000	900000		N	KLOMAN STREET	13				PL	3	13		T	26-Jul-89
BC880489	520000	900000		N	KLOMAN STREET	18				PL	8	18		T	26-Jul-89
BC880490	520000	900000		N	KLOMAN STREET	17				PL	2	17		T	26-Jul-89
BC880491	520000	900000		N	KLOMAN STREET	30				PL	10	30		T	27-Jul-89
BC880492	520000	900000		N	KLOMAN STREET	14				PL	4	14		T	24-Jul-89
BC880493	520000	900000		N	KLOMAN STREET	12				PL	2	12		T	24-Jul-89
BC880494	520000	900000		N	KLOMAN STREET	10				PL	2	10		T	27-Jul-89
BC880495	520000	900000		N	KLOMAN STREET	11				PL	1	11		T	25-Jul-89
BC880496	520000	900000		N	KLOMAN STREET	12				PL	2	12		T	26-Jul-89
BC880497	520000	900000		N	KLOMAN STREET									T	
BC880498	520000	900000		N	KLOMAN STREET	10				PL	2	10		T	25-Jul-89
BC880803	520000	900000		N	LIGHT STREET	18				PL	8	18		T	07-Jun-90
BC881857	520000	900000		N	MONROE ST	22				PL	12	22		T	28-Apr-92

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC881855	520000	900000		N	MONROE ST	22				PL	7	22		T	27-Apr-92
BC881854	520000	900000		N	MONROE ST	20				PL	10	20		T	28-Apr-92
BC881856	520000	900000		N	MONROE ST	30				PL	15	30		T	27-Apr-92
BC881852	520000	900000		N	MONROE ST	21				PL	11	21		T	29-Apr-92
BC881853	520000	900000		N	MONROE ST	19				PL	9	19		T	29-Apr-92
BC941319	520000	900000		N	MONROE ST	15				PL	5	15		T	28-Mar-02
BC882332	520000	900000		N	NANTICOKE ST	30				PL	10	30		T	08-Apr-93
BC920869	520000	900000		N	OSTEND ST	34				PL	14	34		T	23-Feb-96
BC940054	520000	900000		N	OSTEND STREET	20	1	1	1	PL	5	20		T	30-May-96
BC940053	520000	900000		N	OSTEND STREET	20	1	1	1	PL	5	20		T	30-May-96
BC940052	520000	900000		N	OSTEND STREET	20	1	1	1	PL	5	20		T	31-May-96
BC940051	520000	900000		N	OSTEND STREET	20	1	1	1	PL	5	20		T	30-May-96
BC940049	520000	900000		N	OSTEND STREET	20	1	1	1	PL	5	20		T	31-May-96
BC940050	520000	900000		N	OSTEND STREET	20	1	1	1	PL	5	20		T	29-May-96
BC940679	520000	900000		N	PATAPSCO AVE	30								T	15-Jul-99
BC881451	520000	900000		N	PENN ST	62				PL	46	51		T	22-Aug-91
BC880515	520000	900000		N	RACE STREET	24				PL	4	24		T	25-Aug-89
BC880514	520000	900000		N	RACE STREET	22				PL	4	22		T	29-Aug-89
BC880513	520000	900000		N	RACE STREET	17				PL	2	17		T	29-Aug-89
BC880516	520000	900000		N	RACE STREET	22				PL	4	22		T	25-Aug-89
BC880511	520000	900000		N	RACE STREET	15				PL	5	15		T	07-Aug-89
BC880510	520000	900000		N	RACE STREET	15				PL	5	15		T	06-Aug-89
BC880512	520000	900000		N	RACE STREET	17				PL	3	17		T	29-Aug-89
BC880537	520000	900000		N	RACE STREET	17				PL	5	17		T	05-Sep-89
BC880507	520000	900000		N	RACE STREET	120				PL	40	120		T	01-Aug-89
BC880506	520000	900000		N	RACE STREET	117				PL	37	117		T	07-Aug-89
BC940017	520000	900000		N	RIDGLEY	20	1	1	1	PL	5	20		T	01-May-96
BC940018	520000	900000		N	RIDGLEY ST	20	1	1	1	PL	5	20		T	01-May-96
BC940019	520000	900000		N	RIDGLEY ST	20	1	1	1	PL	5	20		T	02-May-96
BC880567	520000	900000		N	RT 2								A	T	
BC880569	520000	900000		N	RT 2								A	T	
BC880700	520000	900000		N	RT 2 & CROMWELL ST	20				PL	10	20		T	12-Apr-90
BC940298	520000	900000		N	RUSSELL ROAD	20				PL	5	20		T	04-Apr-97
BC940300	520000	900000		N	RUSSELL ROAD	20				PL	5	20		T	04-Apr-97
BC940299	520000	900000		N	RUSSELL ROAD	20				PL	5	20		T	04-Apr-97

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC940592	520000	900000		N	RUSSELL ST	20				PL	1	20	T		14-Sep-98
BC940211	520000	900000		N	RUSSELL ST	35	1	1	1	PL	5	35	T		24-Oct-96
BC940210	520000	900000		N	RUSSELL ST	35	1	1	1	PL	5	35	T		24-Oct-96
BC940587	520000	900000		N	RUSSELL ST	20				PL	10	20	T		14-Sep-98
BC940588	520000	900000		N	RUSSELL ST	20				PL	10	20	T		14-Sep-98
BC940589	520000	900000		N	RUSSELL ST	20				PL	10	20	T		14-Sep-98
BC940590	520000	900000		N	RUSSELL ST	20				PL	10	20	T		14-Sep-98
BC940591	520000	900000		N	RUSSELL ST	20				PL	10	20	T		14-Sep-98
BC940209	520000	900000		N	RUSSELL ST	30	1	1	1	PL	5	30	T		25-Oct-96
BC940594	520000	900000		N	RUSSELL ST	20				PL	10	20	T		14-Sep-98
BC920391	520000	900000		N	RUSSELL STREET								T		
BC940593	520000	900000		N	RUSSLEL ST	20				PL	10	20	T		14-Sep-98
BC940434	520000	900000	040	N	S CAREY STREET	25				PL	5	25	T		03-Oct-97
BC881137	520000	900000		N	SEVERN STREET	15				PL	8	13	T		31-Jan-91
BC881138	520000	900000		N	SEVERN STREET								T		
BC940563	520000	900000		N	SOUTH CAREY STREET	20				PL	10	20	T		27-Aug-98
BC882392	520000	900000		N	SOUTH MONROE STREET	25				PL	5	25	T		25-Jun-93
BC882394	520000	900000		N	SOUTH MONROE STREET	25				PL	5	25	T		25-Jun-93
BC882393	520000	900000		N	SOUTH MONROE STREET	25				PL	5	25	T		25-Jun-93
BC940681	520000	900000		N	WARNER STREET					PL	4	14	T		13-Oct-99
BC941338	520000	900000	1D	N	WASHINGTON BLVD	15				PL	5	15	T		16-Apr-02
BC941337	520000	900000	1D	N	WASHINGTON BLVD	15				PL	5	15	T		16-Apr-02
BC941336	520000	900000	1D	N	WASHINGTON BLVD	24				PL	9	24	T		16-Apr-02
BC941335	520000	900000	1D	N	WASHINGTON BLVD	24				PL	9	24	T		15-Apr-02
BC941334	520000	900000	1D	N	WASHINGTON BLVD	24				PL	9	24	T		15-Apr-02
BC940491	520000	900000	MW18	N	WASHINGTON BLVD								T		
BC880592	520000	900000		N	WESTERN AVE	15				PL	5	15	T		31-Oct-89
BC880594	520000	900000		N	WESTERN AVENUE	16				PL	6	16	T		01-Nov-89
BC880593	520000	900000		N	WESTERN AVENUE	18				PL	8	18	T		01-Nov-89
BC880532	520000	900000		N	WICOMICO ST	28				PL	17	27	T		14-Aug-89
BC880531	520000	900000		N	WICOMICO ST								T		
BC880529	520000	900000		N	WICOMICO ST	13				PL	3	13	T		16-Aug-89
BC880530	520000	900000		N	WICOMICO ST	17				PL	7	17	T		15-Aug-89
BC880528	520000	900000		N	WICOMICO ST	13				PL	3	13	T		16-Aug-89
BC941112	520000	900000		N	WICOMICO ST								T		

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC880344	520000	900000		N	WICOMICO STREET	20				PL	12	20		T	28-Feb-89
BC880345	520000	900000		N	WICOMICO STREET									T	
BC880346	520000	900000		N	WICOMICO STREET									T	
BC880348	520000	900000		N	WICOMICO STREET									T	
BC880349	520000	900000		N	WICOMICO STREET									T	
BC880350	520000	900000		N	WICOMICO STREET									T	
BC880378	520000	900000		N	WICOMICO STREET									T	
BC880379	520000	900000		N	WICOMICO STREET	41				PL	31	41		T	04-Mar-89
BC880343	520000	900000		N	WICOMICO STREET	18				PL	8	18		T	02-Mar-89
BC880347	520000	900000		N	WICOMICO STREET									T	
BC940260	520000	900000	6	N	WICOMICO STREET	12								T	07-Jan-97
BC920376	520000	900000		N	WILKENS AVE	30				PL	3	20		T	02-May-94
BC920385	520000	901000		N	HOLLINS FERRY RD									T	
BC920387	520000	901000		N	HOLLINS FERRY RD									T	
BC920386	520000	901000		N	HOLLINS FERRY RD									T	
BC920384	520000	901000		N	HOLLINS FERRY RD									T	
BC880794	520000	902000		N	WICOMICO	14				PL	4	14		T	07-Sep-90
BC880657	520000	905000		N	KLOMAN ST	17				PL	7	17		T	12-Feb-90
BC880654	520000	905000		N	KLOMAN ST	16				PL	11	16		T	11-Feb-90
BC880655	520000	905000		N	KLOMAN ST	20				PL	15	20		T	09-Feb-90
BC880656	520000	905000		N	KLOMAN ST	13				PL	3	13		T	10-Feb-90
BC880423	521000	900000		N	HOLLINS FERRY	30	1	1	1	PL	25	30		T	31-May-89
BC880426	521000	900000		N	HOLLINS FERRY	31	1	1	1	PL	26	31		T	02-Jun-89
BC880424	521000	900000		N	HOLLINS FERRY	31	1	1	1	PL	26	31		T	02-Jun-89
BC880425	521000	900000		N	HOLLINS FERRY	33	1	1	1	PL	28	33		T	01-Jun-89
BC940863	521000	904000		N	ANNAPOLIS RD	20								T	18-Jul-00
BC810828	522000	897000		N	BENSON AVE	48	1	1	1	PL	38	48		T	21-Jul-87
BC810826	522000	897000		N	BENSON AVE									T	
BC810572	522000	901000		N	HOLLINS FERRY RD									T	
BC810569	522000	901000		N	HOLLINS FERRY RD									T	
BC810568	522000	901000		N	HOLLINS FERRY RD									T	
BC810565	522000	901000		N	HOLLINS FERRY RD									T	
BC810564	522000	901000		N	HOLLINS FERRY RD									T	
BC810567	522000	901000		N	HOLLINS FERRY ROAD									T	
BC810566	522000	901000		N	HOLLINS FERRY ROAD									T	

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC941340	522000	904000	MW2A	D	ANNAPOLIS RD	20	1	1	1	PL	10	20	T	T	15-Apr-02
BC941339	522000	904000		N	ANNAPOLIS RD	20	1	1	1	PL	10	20	T	T	15-Apr-02
BC941341	522000	904000	MW1A	N	ANNAPOLIS RD	20	1	1	1	PL	10	20	T	T	15-Apr-02
BC941342	522000	904000	MW3B	N	ANNAPOLIS RD	25	1	1	1	PL	15	25	T	T	16-Apr-02
BC941343	522000	904000	MW2B	N	ANNAPOLIS RD	25	1	1	1	PL	15	25	T	T	16-Apr-02
BC941344	522000	904000	MW1B	N	ANNAPOLIS RD	20	1	1	1	PL	10	20	T	T	16-Apr-02
BC941180	523000	900000	9	N	1325-1381 WESTERN AV									T	
BC880394	523000	902000		D	MONROE ST									T	
BC940783	523000	904000		N	HAINES ST									T	
BC940755	523000	904000		N	SEVERN & BAYARD ST	12								T	04-Nov-99
BC810865	524000	900000		N	RACE ST									T	
BC810864	524000	900000		N	RACE ST									T	
BC810863	524000	900000		N	RACE ST									T	
BC881822	524000	900000		N	WASH. BLVD								A	T	
BC881825	524000	900000		N	WASHINGTON BLVD								A	T	
BC881824	524000	900000		N	WASHINGTON BLVD								A	T	
BC881823	524000	900000		N	WASHINGTON BLVD								A	T	
BC810506	524000	902000		N	BUSH & HAMBURG STS	19	1	1	1	PL	9	19	T	T	18-Apr-86
BC880096	524000	902000		N	MONROE ST	22	1	1	1	PL	10	22	T	T	24-Aug-88
BC880103	524000	902000		N	MONROE ST	19	1	1	1	PL	9	19	T	T	26-Aug-88
BC880104	524000	902000		N	MONROE ST	18	1	1	1	PL	8	18	T	T	25-Aug-88
BC880105	524000	902000		N	MONROE ST	26	1	1	1	PL	10	25	T	T	24-Aug-88
BC880106	524000	902000		N	MONROE ST	19	1	1	1	PL	8	19	T	T	27-Aug-88
BC880107	524000	902000		N	MONROE ST									T	
BC880108	524000	902000		N	MONROE ST	19	1	1	1	PL	9	19	T	T	25-Aug-88
BC880109	524000	902000		N	MONROE ST	22	1	1	1	PL	10	22	T	T	26-Aug-88
BC880099	524000	902000		N	MONROE ST	23	1	1	1	PL	9	23	T	T	30-Aug-88
BC880097	524000	902000		N	MONROE ST	19	1	1	1	PL	8	19	T	T	24-Aug-88
BC881954	524000	902000		N	MONROE ST	35				PL	25	35	T	T	30-Jul-92
BC880095	524000	902000		N	MONROE ST	23	1	1	1	PL	12	23	T	T	22-Aug-88
BC880094	524000	902000		N	MONROE ST	20	1	1	1	PL	8	20	T	T	23-Aug-88
BC880419	524000	902000		D	MONROE ST	25	1	1	1	PL	15	25	T	T	17-May-89
BC880098	524000	902000		N	MONROE ST	23	1	1	1	PL	10	23	T	T	31-Aug-88
BC880102	524000	902000		N	MONROE ST	22	1	1	1	PL	9	22	T	T	31-Aug-88
BC881948	524000	902000		N	MONROE ST	27				PL	7	27	T	T	22-Jul-92

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC881944	524000	902000		N	MONROE ST	35				PL	25	35	T		26-Jul-92
BC881945	524000	902000		N	MONROE ST	49				PL	40	49	T		20-Jul-92
BC881947	524000	902000		N	MONROE ST	50				PL	40	50	T		28-Jul-92
BC881949	524000	902000		N	MONROE ST	50				PL	40	50	T		04-Aug-92
BC881950	524000	902000		N	MONROE ST	50				PL	40	50	T		03-Aug-92
BC881951	524000	902000		N	MONROE ST	50				PL	40	50	T		16-Jul-92
BC881953	524000	902000		N	MONROE ST	26				PL	16	26	T		24-Jul-92
BC881955	524000	902000		N	MONROE ST	50				PL	40	50	T		06-Aug-92
BC881952	524000	902000		N	MONROE ST	22				PL	12	22	T		29-Jul-92
BC881946	524000	902000		N	MONROE ST	35				PL	25	35	T		29-Jul-92
BC881073	524000	902000		N	MONROE ST	40				PL	5	40	T		31-Dec-90
BC881068	524000	902000		N	MONROE ST.	29				PL	4	29	T		14-Jan-91
BC881065	524000	902000		N	MONROE ST.	40				PL	5	40	T		03-Jan-91
BC881066	524000	902000		N	MONROE ST.	40				PL	5	40	T		08-Jan-91
BC881064	524000	902000		N	MONROE ST.	34				PL	4	34	T		29-Dec-90
BC881063	524000	902000		N	MONROE ST.	39				PL	4	39	T		30-Dec-90
BC881062	524000	902000		N	MONROE ST.	37				PL	7	37	T		28-Dec-90
BC881067	524000	902000		N	MONROE ST.	40				PL	5	40	T		09-Jan-91
BC881069	524000	902000		N	MONROE ST.	39				PL	4	39	T		10-Jan-91
BC881070	524000	902000		N	MONROE ST.	40				PL	5	40	T		31-Dec-90
BC881078	524000	902000		N	MONROE ST.	40	1	1	1	PL	5	40	T		30-Dec-90
BC881071	524000	902000		N	MONROE ST.	40				PL	5	40	T		01-Jan-91
BC881076	524000	902000		N	MONROE ST.	35	1	1	1	PL	25	35	T		29-Dec-90
BC881077	524000	902000		N	MONROE ST.	35	1	1	1	PL	25	35	T		29-Dec-90
BC881072	524000	902000		N	MONROE ST.	40				PL	5	40	T		30-Jan-91
BC880101	524000	902000		N	MONROE STREET	19	1	1	1	PL	7	19	T		29-Aug-88
BC880100	524000	902000		N	MONROE STREET	22	1	1	1	PL	9	22	T		30-Aug-88
BC881074	524000	902000		N	MONROE STREET	52				PL	39	52	T		30-Dec-90
BC881075	524000	902000		N	MONROE STREET								T		
BC941569	524000	902000		N	SOUTH MONROE	16				PL	6	16	T		18-Dec-03
BC941520	524000	902000		N	WICOMICO								T		
BC941521	524000	902000		N	WICOMICO								T		
BC941519	524000	902000		N	WICOMICO & MONROE								T		
BC941518	524000	902000		N	WICOMICO & MONROE								T		
BC941517	524000	902000		N	WICOMICO & MONROE								T		

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC941574	524000	903000		N		16				PL	6	16	T		16-Dec-03
BC941572	524000	903000	GW-2	N	MONROE	16				PL	6	16	T		16-Dec-03
BC941573	524000	903000	GW-3	N	SOUTH MONROE	22				PL	12	22	T		19-Dec-03
BC941571	524000	903000	GW-1	N	SOUTH MONROE	16				PL	6	16	T		19-Dec-03
BC941575	524000	903000		N	SOUTH MONROE	16				PL	6	16	T		17-Dec-03
BC941570	524000	903000		N	SOUTH MONROE	16				PL	6	16	T		17-Dec-03
BC810158	524000	904000		N	RUSSEL ST	15	1	1	1	PL	5	15	T		27-Feb-84
BC810159	524000	904000		N	RUSSEL ST	13	1	1	1	PL	3	13	T		27-Feb-84
BC810306	524000	904000		N	RUSSEL ST	13	1	1	1	PL	3	13	T		23-Mar-85
BC810303	524000	904000		N	RUSSEL ST	13	1	1	1	PL	3	13	T		23-Mar-85
BC810162	524000	904000		N	RUSSEL ST	17	1	1	1	PL	2	17	T		27-Feb-84
BC810160	524000	904000		N	RUSSELL ST	13	1	1	1	PL	3	13	T		27-Feb-84
BC810643	524000	904000		N	RUSSELL ST	14	1	1	1	PL	4	14	T		03-Nov-86
BC810305	524000	904000		N	RUSSELL ST	13	1	1	1	PL	3	13	T		23-Mar-85
BC810161	524000	904000		N	RUSSELL ST	14	1	1	1	PL	4	14	T		27-Feb-84
BC880649	524000	905000		N	RUSSELL ST							A	T		
BC940905	524000	905000		N	RUSSELL ST	20				PL	5	20	T		09-Oct-00
BC880647	524000	905000		N	RUSSELL ST							A	T		
BC940906	524000	905000		N	RUSSELL ST	20				PL	5	20	T		09-Oct-00
BC940907	524000	905000		N	RUSSELL ST	20				PL	5	20	T		09-Oct-00
BC880648	524000	905000		N	RUSSELL ST							A	T		
BC880572	524000	905000		N	RUSSELL ST								T		
BC880574	524000	905000		N	RUSSELL ST.	18				PL	4	14	T		05-Oct-89
BC880573	524000	905000		N	RUSSELL ST.								T		
BC920087	524000	905000		N	RUSSELL STREET	15				PL	3	15	T		27-Oct-93
BC940904	524000	905000		N	RUSSELL STREET	20				PL	5	20	T		10-Oct-00
BC940903	524000	905000		N	RUSSELL STREET	20				PL	5	20	T		10-Oct-00
BC940902	524000	905000		N	RUSSELL STREET	20				PL	5	20	T		10-Oct-00
BC920086	524000	905000		N	RUSSELL STREET	15				PL	3	15	T		27-Oct-93
BC940586	524000	905000	MW-2	N	WARNER ST	15				PL	5	15	R	T	19-Oct-98
BC940585	524000	905000	MW-1	N	WARNER ST	15				PL	5	15	R	T	19-Oct-98
BC810644	524000	906000		N	RUSSELL ST	14	1	1	1	PL	4	14	T		03-Nov-86
BC940798	524000	907000			FORT AVE								T		
BC940799	524000	907000			FORT AVE								T		
BC940805	524000	907000	S		FORT AVE								T		

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC940801	524000	907000	S		FORT AVE									T	
BC940803	524000	907000	S		FORT AVE									T	
BC940800	524000	907000	N		FORT AVE									T	
BC940804	524000	907000	S		FORT AVE									T	
BC940802	524000	907000	S		FORT AVE									T	
BC941020	524000	907000	N		FORT AVE	21	1	1	1	PL	6	21		T	09-Mar-01
BC940667	524000	907000	N		FORT AVENUE	13	1	1	1	PL	3	13		T	04-Jun-99
BC810163	524000	907000	N		HOWARD ST									T	
BC810723	525000	901000	N		MONROE ST									T	
BC810724	525000	901000	N		MONROE ST									T	
BC810725	525000	901000	N		MONROE ST									T	
BC810728	525000	901000	N		MONROE ST	18	1	1	1	PL	3	18		T	25-Feb-87
BC810731	525000	901000	N		MONROE ST	16	1	1	1	PL	6	16		T	25-Feb-87
BC810730	525000	901000	N		MONROE ST	15	1	1	1	PL	5	15		T	25-Feb-87
BC810729	525000	901000	N		MONROE ST	24	1	1	1	PL	9	24		T	25-Feb-87
BC880147	525000	901000	N		WASHINGTON BLVD	19	1	1	1	PL	9	19		T	26-Aug-88
BC940939	525000	901000	N		WASHINGTON BLVD	15				PL	5	15		T	21-Nov-00
BC940938	525000	901000	N		WASHINGTON BLVD	15				PL	5	15		T	21-Nov-00
BC880310	525000	901000	N		WASHINGTON BLVD	22	1	1	1	PL	13	22		T	21-Sep-88
BC880309	525000	901000	N		WASHINGTON BLVD	16	1	1	1	PL	11	16		T	21-Sep-88
BC880148	525000	901000	N		WASHINGTON BLVD	25	1	1	1	PL	20	25		T	21-Sep-88
BC880146	525000	901000	N		WASHINGTON BLVD	19	1	1	1	PL	9	19		T	26-Aug-88
BC880145	525000	901000	N		WASHINGTON BLVD	18	1	1	1	PL	8	18		T	26-Aug-88
BC880144	525000	901000	N		WASHINGTON BLVD	15	1	1	1	PL	9	15		T	26-Aug-88
BC810732	525000	901000	N		WASHINGTON BLVD	21	1	1	1	PL	6	21		T	25-Feb-87
BC940936	525000	901000	N		WASHINGTON BLVD									T	
BC940937	525000	901000	N		WASHINGTON BLVD									T	
BC940960	525000	901000	N		WASHINGTON BLVD	16				PL	6	16		T	04-Dec-00
BC940985	525000	901000	N		WASHINGTON BLVD	22				PL	13	22		T	26-Dec-00
BC940959	525000	901000	N		WASHINGTON BLVD	22				PL	7	22		T	04-Dec-00
BC940958	525000	901000	N		WASHINGTON BLVD	16				PL	6	16		T	04-Dec-00
BC940961	525000	901000	N		WASHINGTON BLVD	15				PL	5	15		T	05-Dec-00
BC940962	525000	901000	N		WASHINGTON BLVD	17				PL	7	17		T	05-Dec-00
BC940963	525000	901000	N		WASHINGTON BLVD	22				PL	7	22		T	05-Dec-00
BC940964	525000	901000	N		WASHINGTON BLVD	16				PL	6	16		T	05-Dec-00

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Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC940984	525000	901000		N	WASHINGTON BLVD	22				PL	7	22		T	26-Dec-00
BC940983	525000	901000		N	WASHINGTON BLVD	22				PL	7	22		T	26-Dec-00
BC810498	525000	902000		N	BUSH	25	1	1	1	PL	15	25		T	11-Apr-86
BC880088	525000	903000		N	BAYARD	20	1	1	1	PL	8	18		T	30-Oct-88
BC880086	525000	903000		N	BAYARD ST	20	1	1	1	PL	10	20		T	30-Oct-88
BC880087	525000	903000		N	BAYARD ST	20	1	1	1	PL	10	20		T	30-Oct-88
BC810499	525000	903000		N	BUSH	19	1	1	1	PL	8	18		T	16-Apr-86
BC810504	525000	903000		N	BUSH	18	1	1	1	PL	8	18		T	16-Apr-86
BC810500	525000	903000		N	BUSH	19	1	1	1	PL	9	19		T	17-Apr-86
BC810501	525000	903000		N	BUSH									T	
BC810502	525000	903000		N	BUSH	18	1	1	1	PL	8	18		T	21-Apr-86
BC810507	525000	903000		N	BUSH & HAMBURG ST	19	1	1	1	PL	9	19		T	08-Apr-86
BC810505	525000	903000		N	BUSH & HAMBURG ST									T	
BC810503	525000	903000		N	BUSH & HAMBURG ST	18	1	1	1	PL	8	18		T	15-Apr-86
BC810508	525000	903000		N	BUSH ST	19	1	1	1	PL	9	19		T	08-Apr-86
BC810509	525000	903000		N	BUSH ST	19	1	1	1	PL	9	19		T	17-Apr-86
BC810510	525000	903000		N	BUSH ST	18	1	1	1	PL	8	18		T	09-Apr-86
BC810511	525000	903000		N	BUSH ST									T	
BC941147	525000	903000	MW101	N	HAMBURG ST	20	1	1	1	PL	5	20		T	04-Sep-01
BC941146	525000	903000	MW100	N	HAMBURG ST	20	1	1	1	PL	5	20		T	04-Sep-01
BC941469	525000	903000			WICOMICO STREET	35	1	1	1	PL	25	35		T	13-Jan-03
BC941465	525000	903000			WICOMICO STREET	20	1	1	1	PL	10	20		T	10-Jan-03
BC941466	525000	903000			WICOMICO STREET	34	1	1	1	PL	24	34		T	10-Jan-03
BC941467	525000	903000			WICOMICO STREET	50	1	1	1	PL	40	50		T	09-Jan-03
BC941468	525000	903000		N	WICOMICO STREET	20	1	1	1	PL	10	20		T	09-Jan-03
BC941470	525000	903000			WICOMICO STREET	52	1	1	1	PL	42	52		T	08-Jan-03
BC940993	525000	904000		N	1401 SEVERN ST	20		9	19	PL	2	18		T	25-Jan-01
BC940992	525000	904000		N	1401 SEVERN ST	20		4	17	PL	3	18		T	23-Jan-01
BC940991	525000	904000		N	1401 SEVERN ST	21		10	18	PL	5	20		T	22-Jan-01
BC940989	525000	904000		N	1401 SEVERN ST	21		10	19	PL	5	20		T	23-Jan-01
BC940994	525000	904000		N	1401 SEVERN ST	21		9	19	PL	6	21		T	25-Jan-01
BC940990	525000	904000		N	1800 BAYARD ST	20		9	19	PL	5	20		T	24-Jan-01
BC940756	525000	904000		N	SEVERN & BAYARD ST	10								T	05-Nov-99
BC940758	525000	904000		N	SEVERN & BAYARD STS	16								T	04-Nov-99
BC940757	525000	904000		N	SEVERN ST & BAYNARD	16								T	03-Nov-99

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BC810620	525000	905000		N	BAYARD	8	1	1	1	PL	1	8	T	07-Oct-86	
BC810619	525000	905000		N	BAYARD	6	1	1	1	PL	1	6	T	07-Oct-86	
BC810618	525000	905000		N	BAYARD	19	1	1	1	PL	4	19	T	24-Sep-86	
BC810617	525000	905000		N	BAYARD	19	1	1	1	PL	4	19	T	24-Sep-86	
BC810616	525000	905000		N	BAYARD RD	19	1	1	1	PL	3	19	T	24-Sep-86	
BC730009	525000	905000	15	N	LIGHT ST	57	25	8	15	ST	56	6	T	11-Jul-75	
BC730008	525000	905000	15	N	LIGHT ST	50	152	1	19	ST	50	10	T	04-Jul-75	
BC940537	525000	905000		N	RUSSELL ST								T		
BC940512	525000	905000		N	WEST STREET								T		
BC920865	525000	906000		N	RUSSELL ST	45				PL	40	45	T	01-Mar-96	
BC920867	525000	906000		N	RUSSELL ST	45				PL	30	45	T	01-Mar-96	
BC920866	525000	906000		N	RUSSELL ST	45				PL	40	45	T	01-Mar-96	
BC920868	525000	906000		N	RUSSELL STREET	45				PL	40	45	T	01-Mar-96	
BC941199	526000	896000		N	WILKENS AVENUE	30				PL	20	30	T	16-Jan-02	
BC940297	526000	898000		N	WILKENS AVE	20							T	21-Mar-97	
BC880676	526000	900000		N	HOLLINS FERRY	25				PL	15	25	T	07-Feb-90	
BC880679	526000	900000		N	HOLLINS FERRY	43				PL	33	43	T	06-Feb-90	
BC880671	526000	900000		N	HOLLINS FERRY	14				PL	7	17	T	18-Jan-90	
BC880670	526000	900000		N	HOLLINS FERRY	13				PL	8	13	T	18-Jan-90	
BC941460	526000	900000	MW-25	N	WASHINGTON BLVD								T		
BC881896	526000	902000		N	1515 WASHNGTON BLVD	29				PL	14	29	T	08-Jul-92	
BC881897	526000	902000		N	1515 WASHNGTON BLVD	29				PL	14	29	T	07-Jul-92	
BC881894	526000	902000		N	1515 WASHNGTON BLVD	29				PL	14	29	T	07-Jul-92	
BC881895	526000	902000		N	1515 WASHNGTON BLVD	29				PL	14	29	T	08-Jul-92	
BC881898	526000	902000		N	1515 WASHNGTON BLVD	29				PL	14	29	T	07-Jul-92	
BC881899	526000	902000		N	1515 WASHNGTON BLVD	29				PL	14	29	T	08-Jul-92	
BC880932	526000	902000		N	BAYARD STREET	35				PL	30	35	T	21-Sep-90	
BC880930	526000	902000		N	HAMBURG ST	35				PL	30	35	T	21-Sep-90	
BC880933	526000	902000		N	HAMBURG ST.	16				PL	6	16	T	21-Sep-90	
BC880796	526000	902000		N	NANTICOKE ST	37				PL	32	37	T	07-Sep-90	
BC880931	526000	902000		N	NANTICOKE ST.	37				PL	32	37	T	21-Sep-90	
BC880961	526000	902000		N	NANTICOKE STREET	15				PL	5	10	T	21-Sep-90	
BC880797	526000	902000		N	W. HAMBURG								T		
BC880795	526000	902000		N	W. HAMBURG	38				PL	33	38	T	07-Sep-90	
BC880793	526000	902000		N	WICOMICO	36				PL	31	36	T	07-Sep-90	

Appendix A

Well Grid Search from MDE

Site Investigation Work Plan

MTA Bush Street Bus Facility, Baltimore, MD

Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC940998	526000	904000		N	1401 SEVERN ST	21		10	19	PL	5	20	T		23-Jan-01
BC941769	526000	905000	21A	N	S PACA ST								T		06-Dec-04
BC881837	526000	906000		N	CAMDEN ST	45				PL	35	45	T		05-May-92
BC881835	526000	906000		N	CONWAY ST								T		
BC881908	526000	906000		N	CONWAY STREET	40				PL	30	40	T		21-May-92
BC881909	526000	906000		N	CONWAY STREET	35				PL	25	35	T		28-May-92
BC881836	526000	906000		N	I 395	45				PL	35	45	T		30-Apr-92
BC881838	526000	906000		N	PRATT ST	45				PL	35	45	T		30-Apr-92
BC881834	526000	906000		N	SHARP ST								T		
BC881469	526000	907000	6A	N	S. PACA ST	35				PL	25	35	T		14-Aug-91
BC881471	526000	907000	6A	N	S. PACA ST	35				PL	25	35	T		12-Aug-91
BC881470	526000	907000	6A	N	W. PRATT ST	35				PL	25	35	T		13-Aug-91
BC941035	527000	898000	MW2	N	WILKENS AVENUE	34				PL	24	34	T		23-May-01
BC941030	527000	898000	MW4	N	WILKENS AVENUE	23				PL	13	23	T		01-Jun-01
BC941034	527000	898000	MW3	N	WILKENS AVENUE	25				PL	15	25	T		24-May-01
BC941033	527000	898000	MW1	N	WILKENS AVENUE	28				PL	18	28	T		31-May-01
BC941032	527000	898000	MW6	N	WILKENS AVENUE	23				PL	13	23	T		29-May-01
BC941031	527000	898000	MW5	N	WILKENS AVENUE	14				PL	4	14	T		29-May-01
BC810455	527000	903000		N	HAMBURG ST	195	1	1	1	PL	9	19	T		12-Dec-85
BC810454	527000	903000		N	HAMBURG ST	22	1	1	1	PL	7	22	T		16-Dec-85
BC810456	527000	903000		N	HAMBURG ST	19	1	1	1	PL	9	19	T		12-Dec-85
BC810453	527000	903000		N	HAMBURG ST	19	1	1	1	PL	8	18	T		16-Dec-85
BC810495	527000	906000		N	CONWAY ST	32	1	1	1	PL	12	32	T		01-Apr-86
BC810496	527000	906000		N	CONWAY ST	37	1	1	1	PL	17	37	T		01-Apr-86
BC810497	527000	906000		N	HOUSER ST	36	1	1	1	PL	16	36	T		01-Apr-86
BC882340	528000	898000	N		S. CALVERTON ROAD	14				PL	4	14	T		10-May-93
BC940832	528000	903000		N	OSTEND STREET	20				PL	5	20	T		26-Apr-00
BA882886	528000	906000		N	BEAVER DAM ROAD	55	1	1	1	PL	35	55	T		22-Oct-90
BC880249	528000	906000		N	CONWAY ST	13	1	1	1	PL	2	13	T		25-May-88
BC880250	528000	906000		N	CONWAY ST	11	1	1	1	PL	2	11	T		25-May-88
BC880248	528000	906000		N	CONWAY ST	14	1	1	1	PL	3	14	T		25-May-88
BC881532	528000	906000		N	PRATT ST.								T		
BC880404	528000	906000		N	RUSSELL ST	30	1	1	1	PL	20	30	T		17-May-89
BC880081	528000	907000		N	EUTAW ST	25	1	1	1	PL	20	25	T		02-Sep-88
BC880079	528000	907000		N	RUSSELL ST	35	1	1	1	PL	30	35	T		22-Aug-88

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Site Investigation Work Plan

MTA Bush Street Bus Facility, Baltimore, MD

Permit No.	N_Grid27	E_Grid 27	Lot	Replacement	Road Name	Total Depth	Pumping Rate	Level Before	Level During	Screen Type 1	Top Screen	Bottom Screen	Closed	Use	Completed
BC880405	528000	907000		N	W LEE ST	30	1	1	1	PL	20	30	T		17-May-89
BC880080	528000	907000		N	W WEST ST	40	1	1	1	PL	35	40	T		10-Aug-88
BC880078	528000	907000		N	WEST CONWAY ST	40	1	1	1	PL	35	40	T		12-Aug-88